

**Department of Conservation
California Abandoned Mine Lands Forum
1027 10th Street
Sacramento, CA**

**February 11, 2003
Meeting Summary**

Facilitator and Meeting Summary: Carol Atkins, Harris & Company

Attendees:

Mike Hunerlauch, USGS	Sarah Reeves, Department of Conservation
Doug Craig, Department of Conservation	Rick Weaver, US Forest Service, Tahoe
Donna Podger, CA Bay-Delta Authority	Patrick Morris, CVRWQCB
Darcy Jones, SWRCB	Rick Humphreys, SWRCB
Becky Wood, Teichert	Bob De Tar, US Forest Service, Tahoe
G. Fred Lee, G. Fred Lee & Associates	Alex Wood, USGS
Pat G. Cullen, Brown and Caldwell	Lynn Mireles, Dolver Company
Gail Bakker, Nevada Co. RCD	Jerry Boles, DWR
Janine Clayton, US Forest Service, Vallejo	Jessie Smith, SWRCB
Steve Becker, DTSC	Jim Tjosvol, DTSC
Noah Tilghman, Dept. of Parks & Recreation	Sandra Lunceford, Camp, Dresser, McKee
John Clinkenbeard, DOC– Geologic Survey	Ron Churchill, DOC- Geologic Survey
Eugene Mullenmeister, Shaw Environmental	Gary Fregien, Dept. of Parks & Recreation
Mike Fuller, DOC– Geologic Survey	Jon Mistchenko, Dept. of Conservation
Patrick Morris, CVRWQCB	Philip Woodward, CVRWQCB
Guy Chetelat, CVRWQCB	Rob Busby, CVRWQCB
Ben Licari, Granite Rock	Jean Kiel, Shaw Environmental
Leroy Mohorich, BLM	Dave Lawler, BLM
Daryl Peterson, US BOR	

Agenda:

- I. Meeting Format and Agenda Review
- II. Welcome
- III. Extended Introductions Including Current Projects and Interests
- IV. DOC Abandoned Mine Inventory
- V. Next Meeting

Meeting

I. Meeting Format and Agenda Review

Meeting Format: Carol Atkins began the meeting by greeting attendees and thanking them for their participation and interest in the California Abandoned Mine Lands Forum (AML Forum). She noted that this was the first meeting of the group,

and as such, she would be looking to receive input from participants on what their interests are with respect to Abandoned Mine Lands.

Agenda Review: Carol reviewed the agenda with the group; no changes were made.

II. Welcome

Doug Craig, manager of the Abandoned Mine Lands Unit for the Office of Mine Reclamation of the Department of Conservation, welcomed attendees. He reminded participants that state programs investigating and working on abandoned mines are housed in many different agencies. He indicated that a goal for this Forum is to create greater dialog on the issues that these respective agencies are working on, as well as incorporating dialog with local and federal agencies and industry. Doug also recognized the California Bay-Delta Authority (formerly CALFED) for providing funding for the Forum.

Doug discussed the previous AML Task Force that had concluded work a couple of years earlier. That group had four goals: (1) to create an official state government database on abandoned mine lands, (2) to support the Western Governor's Association; (3) to define the term abandoned mine; and (4) to receive input on the Abandoned Mine Lands Report to the Legislature. Several of the meeting attendees present had also participated in the Task Force effort.

Doug also emphasized that this Forum is a new group that he envisions being an ongoing effort and that can provide collaboration on remediation projects including funding opportunities. He noted that it is intended that the AML Forum be statewide in both discussion topics and participation. To that end, he is currently working on creating a website link to post information on the AML Forum. He further indicated that he would like to see the group set its own course and that the DOC staff would facilitate that dialog, but look to the larger entity for input on presentation and discussion topics for future meetings.

In addition, Doug noted that a concerted effort would be made not to overlap with other existing dialog efforts, and recognized those efforts ongoing in the Sacramento area – the Delta Tributaries Mercury Council, the Sierra-Trinity Abandoned Mine Lands Agency Group and the Sacramento Regional County Sanitation District's Offsets Workgroup.

In addition, Darryl Young, Director of the Department of Conservation, recognized the challenges agencies face when working on abandoned mines and expressed his support for the group. He indicated that topics such as prioritization of mine sites; sources of funding; dealing with stakeholder perceptions regarding mine cleanup and safety issues; and appropriate responses to the mining legacy in California were ones he would be interested in getting feedback from the AML Forum.

III. Extended Introductions (including current projects and AML interests)

Carol asked attendees to introduce themselves. In addition to providing name and agency/employer, she asked participants to identify the types of AML projects that each person is working on and to identify subjects that each would like to see explored through this forum. This information is summarized in a Contact Table, which the participants determined they would like developed and maintained. The project topics were condensed and categorized as follows:

- Mining affects on biota
- Arsenic mines
- Cleanup Priorities
- Acid Mine Drainage
- FERC Re-licensing and associated environmental studies
- Sediment impacts to watersheds
- Management measures and their application to keep mine contaminants and sediment on site/out of the water
- Closure of physical hazards
- Funding and Partnerships
- Metals transport
- Remediation Projects
- Asbestos Mining
- Liability associated with mine remediation
- Good Samaritan legislation (federal level)

Other comments highlighted in this discussion included:

- A suggestion was made to form workgroups based on subwatersheds.
- It was recognized that the location of a mine from infrastructure challenges us to increase creativity of a remediation project.
- As acid mine drainage has dramatic affects on a waterbody, the question was raised as to "what can reasonably be restored with respect to fish and benthos?"
- The State Water Resources Control Board Interagency Coordinating Committee Subcommittee on Abandoned Mine Lands, which had met twice in 2002, decided to disband as participants felt that their dialog was best continued in this statewide forum.
- With an increase in the price of gold, the interest and activity in gold mining may also increase.
- Group members were interested in generating "living" information documents from discussions in this Forum.

IV. Presentation: DOC Abandoned Mine Lands Inventory

Sarah Reeves with the Department of Conservation's Office of Mine Reclamation gave a presentation on the Abandoned Mine Inventory database.

Sarah explained that the Department of Conservation's Abandoned Mine Lanes Program was authorized in 1997 with the objectives of (1) evaluating the existing

data; (2) compiling inventory data into a statewide database; (3) compiling data on priority watersheds; and (4) preparing a report for the legislature on the “Scope and Magnitude” of abandoned mine lands issues in California.

Based on field investigations and statistical extrapolation of the data collected for the inventory, it was estimated that there are:

- 46,900 historic and inactive mines
- 5,200 with environmental hazards and 39,400 with physical hazards
- 154, 800 mine features
- 58,800 with hazardous openings

The AML Unit first determines where to conduct inventories based on preliminary data. Field data is collected, and then entered into the database, where subsequent analysis can be performed. The AML Unit has currently inventoried 1,885 mine sites that have also been ranked with respect to these hazards. The ranking is relative to the other sites in the database. Sarah indicated that it is possible, keeping this in mind, to use the information to help guide priorities for physical and chemical remediation.

Sarah gave a demonstration of how to use the database.

The group discussed the availability of the data and the ranking criteria. A small group of people were interested in following up with Department of Conservation staff on the ranking system.

V. **Next Meeting**

Format: Carol indicated that the meeting format for today’s meeting was predetermined, but looked to the group to give direction for future meetings. Group participants stressed having some work products coming out of the meetings was desirable. It was also suggested that presentations continue to be part of the meetings, as they are very informative.

Next Meeting: The next meeting has been scheduled for May 15, 2003. It will be held from 9 to noon at the sixth floor conference room at 1027 10th Street.

G. Fred Lee volunteered to give a presentation on remediation efforts being conducted/being considered at the Lava Cap Mine area (gold and silver mines) and human health concerns associated with arsenic. In addition, meeting participants agreed to discuss their respective sources of funding and mechanisms of funding abandoned mine land projects. Participants asked that a summary table of this discussion be produced following the next meeting.

A lot of interest was expressed in discussing the legal liability associated with mine remediation. Donna Podger (California Bay-Delta Authority) indicated that the Authority staff is working on a paper on that topic, and suggested that the group

have that discussion in the near future, but not at the next meeting. Participants were agreeable.

It was noted that representatives from US EPA and the Army Corp of Engineers were not present. Group participants also expressed the desire to see more representatives from county government in attendance. The group asked Carol to follow-up in contacting these entities.